Book Review

HODGES, R.W. 1971. Sphingoidea. Fascicle 21. In The moths of America north of Mexico, including Greenland. FERGUSON, R.B. FRANCLEMONT, J.G. HODGES, R.W. MUNROE, E.G. DOMINICK, R.B. EDWARDS, C.R. Editors. E.W. Classey Ltd. & R.B.D. Publications Inc., London, xii + 158 pp., 4 black & white, 14 color plates; 2 pages of line drawings at the end, 19 groups of line drawings in the text. Size 8-7/8" x 11½", wrap cover, 103 references. Price: £-10.00; \$24.00.

Printed in England, "The Sphingoidea" section of this encyclopaedic work on North American moths is the first of 41 planned. The work is scheduled for completion in about twelve years and the "Announcement" of publication states: "it is intended that a similar work on skippers and butterflies will follow."

"The moths of America north of Mexico, including Greenland" will be the first comprehensive treatise on more than 10,000 moth species known from that region. It is superbly illustrated and the 14 color plates contained in fascicle 21 deserve special mention. The plates were reproduced from 4" x 5" transparencies taken by R.B. Dominick and C.R. Edwards and printed by offset lithography in four colors. Credit must be given to them as well as to The Curwen Press of London.

Dr. R.W. Hodges, of the U.S.D.A., Systematic Entomology Laboratory in Washington, D.C., the author of "Sphingoidea", earned his doctorate at Cornell University in insect taxonomy. "Sphingoidea" is a synthesis of past revisionary studies of the group. One species is described as new and one new genus is proposed, along with 13 new combinations.

The work is intended for use by both the professional and the amateur entomologist. Two pages of line drawings at the end together with fig. 1, provide a good introduction to structural characteristics. The text figures by Dr. Hodges' wife Elaine R. Hodges are fully labelled and self explanatory; scales apparently vary but are not indicated. It is unfortunate that genital armatures are not pictured for all the species described.

The book begins with an introductory note followed by the introduction to and supraspecific classification of North American Sphingidae. It contains a key to genera based on adults, a partial key to genera based on pupae (after Mosher, 1918), and a partial key to genera based on mature larvae (after Forbes, 1911). For each genus, a complete citation of its original description, type species designation, synonymy, generic description and key to its species are given. For each species, a complete citation of its original description, synonymy, type locality, and where applicable an official common name are given. Species are briefly and unevenly discussed. A review of important literature on the group concludes the text. The color plates portray life size 199 specimens of all species described and the major polymorphs. Each plate is faced by legend and followed by explanatory notes. The book is concluded by indices to animal names and to plant names.

According to the "Announcement", the completed work will include an introduction, to be published last. This part is intended to include sections on morphology, phylogeny, ecology, faunal history, distribution, variation, migration, and dispersal. These are aspects either not covered in "Sphingoidea" or discussed only briefly. I fear that when published, years from now, they may not be adequate for the whole work. For example, species zoogeography is briefly discussed here and there in "Sphingoidea" but no distribution maps are given. For zoogeographic or dispersal studies, all specimens must be examined again. The omission of illustrations of immature stages is another of the few weaknesses. Minor errors include, on p. 47 penultimate line: "Isoparce is a monotypic genus." A genus proposed for a single species is better described as monobasic since all genera have, by rule, only one type species. A little more serious is incorrect binominal nomenclature, as on p. 149, "Pluto has